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ABSTRACT

The first of five reports from a project on mainstreaming the handicapped in vocational education presents a literature review drawn from an ERIC (Educational Resources Information Center) search and responses by 16 secondary school curriculum leaders. The review touches upon the following topics: history, P.L. 94-142 (the Education for All Handicapped Children Act), mainstreaming, the population, specialization, current program models, cooperative work experience and placement, regional support, and aspects of successful programs (such as individualized instruction, flexible grading, and coordinated leadership). (CL)

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MAINSTREAMING THE HANDICAPPED IN VOCATIONAL EDUCATION

(A RESEARCH PROJECT IN VOCATIONAL EDUCATION IN THE PORTLAND PUBLIC SCHOOLS)

LITERATURE REVIEW

by
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January 1978

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EXECUTIVE SUMMARY

The "Education for All Handicapped Act", P.L. 94-142, will have profound affects on the vocational education of special needs students and will substantially influence ways in which public schools deliver special education services. To fully implement P.L. 94-142, changes will be necessary in teacher pre-service and inservice training, the attitudes of teachers toward the handicapped, instructional philosophies and methods, procedures for diagnosing and prescribing for learning needs, and the cooperative, supportive atmosphere in which educators must work together. No less demanding will be the removal of physical barriers in school buildings.

Current estimates suggest that perhaps half of the special needs student population may not be receiving needed special services. Those handicapped students who are receiving vocational instruction do so in four basic program models: regular placement with support; regular placement with no special support; vocational instruction in special education classes; or in a situation where the curriculum and grading are modified to meet individual student needs.

There are several characteristics of successful programs for vocational education of the handicapped. Noteworthy programs are generally characterized by greater teacher cooperation, progressive inservice programs, effective use of instructional aides and tutoring, individualized instruction and modified

curriculum, flexible and competency based grading, planned work experience, careful coordination of special needs students, coordination of educational leadership, and modification of equipment and facilities, when it is necessary.

It is hoped that the information in this report will assist school administrators and vocational teachers as they plan for the vocational education of special needs learners.

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MAINSTREAMING THE HANDICAPPED IN VOCATIONAL EDUCATION

(A RESEARCH PROJECT IN VOCATIONAL EDUCATION IN THE PORTLAND PUBLIC SCHOOLS)

INTRODUCTION

BACKGROUND INFORMATION: In August, 1977, the Portland Public School District was awarded a $68,767.00 grant to design, develop, and test the necessary strategies for substantially increasing the number of handicapped youth enrolled in vocational education programs. The central purpose of the project is to improve the capacity of the Portland School District to fully implement individualized vocational education instruction, as required by P.L. 94-142, in a maximum number of classroom and field-based vocational programs.

The project was divided into five phases. The first phase, the subject of this report, is the review of literature.

METHOD: The San Mateo County Educational Resource Center (SMERC) was requested to search the topic. The process also included a search of ERIC resources. Seven descripters were used, and over 35,000 resource materials were searched. The SMERC printout yielded fourteen titles. These, along with a number of other journal articles, documents, and project reports, provided more than thirty-five titles which were read. In addition to the bibliography following this report, an annotated bibliography will be maintained throughout the tenure of the project. In order to get further, more current information, letters were sent to seventy secondary school curriculum leaders to learn

what their school districts were doing regarding the mainstreaming of handicapped youth in vocational programs. (The letter is shown in Appendix A, and the list of the curriculum leaders is shown in Appendix B.) Letters were sent to sixty cities in thirty-two states, and two were sent to Canada.

Sixteen helpful responses were received. Many of the letters included very thoughtful and candid remarks, and several districts also sent materials. Eleven school districts sent polite letters, most of which stated that they were interested in the topic, but they had not yet done very much regarding the mainstreaming of handicapped youth in vocational programs.

The total response rate from the educational leaders was approximately forty-one percent, which was encouraging.

LITERATURE REVIEW

HISTORY: Attitudes about, and treatment of handicapped persons have changed greatly in recent years. Early civilizations viewed handicapped individuals as undesirable or often dangerous persons. They were often thought to have been accursed of the gods, and they were usually ostracized by society. As time progressed, the Medieval mind recognized handicapped persons as a responsibility of others. "Begging by the blind, deaf, crippled, and those of 'weak minds' was allowed because the wrath of God supposedly would strike those who refused to tolerate the existence of the handicapped person." (26:126)

Education of the handicapped went largely unnoticed during the early development of our nation. A number of asylums were established for the blind, deaf, and retarded, but there was little public readiness to accept those individuals in the mainstream of society. Although laws regarding free public education were available in states as early as 1827 (Massachusetts High School Law), handicapped persons were generally excluded. In fact, enforcement of the above mentioned law did not occur until ten years later, when Horace Mann assumed control of the Massachusetts Board of Education. (13:247) State statutes for permissive or mandatory education of handicapped children began in 1911 (New Jersey) and subsequently were accepted by other states. (26:128)

Melcher speculates that the period following World War II provided the proper atmosphere for a major thrust in serving the handicapped. He suggests the following factors have had a positive affect on education of the handicapped: (26:128)

Expanded professional knowledge.
The awareness of and the need to repair war-wounded.
Leadership of prominent individuals.
Amalgamation of professional groups.
Political expedience.
The 1962 report, "A Proposed Program for National Action to Combat Mental Retardation".
The recent role of the federal government.

A number of federal laws have greatly affected education of the handicapped. The Civil Rights Act of 1964 is of primary importance in that it provided a basis in philosophy if not in law, for future legislation. Since by law no person can be denied educational

opportunity because of race, it would logically follow that a handicapping condition must not be allowed to interfere with an individual's education.

Other federal and state laws have addressed the education of the handicapped issue in recent years. (10:144-147; 4:3) In 1958, P.L. 85-926 provided grants to colleges and universities and to state education agencies for the purpose of training teachers of the mentally retarded. Three years later, P.L. 87-276 elevated the office of Section on Exceptional Children and Youth to Branch Level, a rise in bureaucratic status for the office. P.L. 88-164, through broad definition, identified the handicapped population that was to receive federal support. The Bureau of Education for the Handicapped was created in 1966 with the enactment of P.L. 89-750. It became part of P.L. 91-230 in 1970, which reinforced federal commitment to education of the handicapped. In the meantime, P.L. 90-170 in 1967, and P.L. 90-576 in 1968, had authorized programs in physical education and recreation and in training of leadership personnel, supervisors and researchers, and continued provisions for grants to states, colleges, and universities. The 1973, P.L. 93-112 prohibited discrimination against handicapped Americans in any federally funded program. In 1974, Public Laws 93-380 and 93-516 restated federal commitment to the preparation of personnel to teach handicapped, and clarified the definition of "handicapped" in section 504 of the Rehabilitation Act of 1973. The "Buckley Ammendments" to P.L. 93-380 addressed the rights of parents to

examine the school records of their children upon request. It set an important precedent seen in P.L. 94-142.

Of major importance is P.L. 90-480, the Architectural Barriers Act of 1968, which requires that facilities built or leased with federal funds must be free of barriers. Also, Section 504 of P.L. 93-112 addresses the problem of architectural barriers in public schools.

The Vocational Education Ammendments of 1976 provided specific set-aside monies for the vocational education of handicapped youth. The Educational Amendments of 1975 included P.L. 94-142, which is perhaps the most noteworthy federal legislation since the Civil Rights Amendment of 1964. The effects of "The Education for All Handicapped Act" on school finance, curriculum, instructional methodology, personnel practices, inservice and pre-service training, and public relations will be significant for years to come.

P.L. 94-142: The intent of the "Education for All Handicapped Act" is to provide every child with the opportunity for a free, appropriate, public education. Further, it states that the handicapped child must be placed in the least restricted learning environment possible. This may not necessarily indicate mainstreaming, because in some cases, a regular class setting may be more restrictive than special classes or even a non-school setting. "Least restrictive" should refer to the maximum effective use of

all resources to provide an appropriate individualized educational program based on a student's unique needs. In addition to securing parental consent prior to a formal student assessment, it appears that the following procedures must be provided in order to meet minimum due process standards in the identification, evaluation, and educational placement of handicapped children. (3:71)

Written notification before evaluation.
Parents always have the right to an interpreter/ translator if their primary language is not English.

Written notification before change in educational placement.

Periodic review of educational placement.

Opportunity for an impartial hearing including the right to:

Receive timely and specific notice of such hearing.
Review all records.
Obtain an independent evaluation.
Be represented by counsel.
Cross examine.
Bring witnesses.
Present evidence.
Receive a complete and accurate record of proceedings.
Appeal the decision.

Assignment of a surrogate parent for children when:

The child's parent or guardian is not known.
The child's parents are unavailable.
The child is a ward of the state.

It is estimated that perhaps half of the handicapped children of school age are currently receiving appropriate special services. (25:5; 33:36) The total number of handicapped individuals may be in excess of six and one half million. (33:36) The estimated number of handicapped pre-school and school age youngsters in Oregon is in excess of 65,000 persons. Further, it is reported

that as of February, 1976, only 43,296, or approximately sixty-six percent of these youths are being served appropriately by public or private school programs. (29:E1)

MAINSTREAMING: One might be struck by an irony as one reflects on how we have progressed from early special education philosophy and legislation to the contemporary concept of mainstreaming. In the 1950's and 1960's we emphasized segregated special classes for retarded students and children with other learning difficulties. Shortcomings of special education placement have long been apparent. Little regard was given to learning styles, which might allow for regular class placement, and special education labels often became self-fulfilling prophecies within the educational system. Students very often did not learn up to their potential. There were often incomplete opportunities for special needs youngsters to develop to their social potential. Also, normal youth were restricted in their contact with the handicapped; thus, they often did not get an accurate perception of society. Nevertheless, the prevailing point of view until P.L. 94-142, was that special educators were best prepared to provide the educational experiences for handicapped learners, and special classes provided the best learning environment. For three decades, teacher training institutions have become more and more specialized in their preparation of teachers of special needs students.

Training programs for special education teachers have been expanded

in recent years, and the field has established itself as a highly regarded specialty field within the education profession. In 1974, more than 400 colleges and universities, about five times as many as in 1948, provided training programs for teachers who wanted to enter the special education field. (9:20) The effect has been for special education to more and more greatly assume the responsibility for educating special needs youngsters, which, it is estimated, make up about ten percent of the school age population. Conversely, general and vocational educators have had minimal contact with special needs youngsters in recent years. Their skills in teaching and attitudes about working with special needs youngsters may often be in conflict with their new responsibilities as stated in P.L. 94-142.

The assumption inherent in P.L. 94-142 is that a more appropriate education will be available to handicapped youngsters through mainstreaming. Again, the concept of least restrictive environment must be applied. It is further assumed that handicapped youth have a right to a free, appropriate, public education, and that an investment in their education is worthwhile. Current projections suggest that about one in four handicapped high school learners, either by graduation or dropout, will be fully employed or enrolled in college. Another forty percent of the group will be underemployed and probably twenty-five percent will require welfare assistance. (25:6; 33:37) There is a clear economic rationale for preparing handicapped youth with marketable skills.

Proponents of mainstreaming also point out that handicapped youngsters vary in their own learning styles much as do normal youngsters. To place students in homogeneous classes based on minimal I.Q. score or some other handicap does not take into account the unique learning needs and abilities of the individual. Regardless of the method of placement, a more functional method for planning an individual's prescribed learning program is one based on the identified needs and learning strengths of the individual, and one where a periodic review and evaluation of the teaching-learning relationship takes place.

Classroom teachers are well aware of individual differences in learners, regardless of how they are grouped, and responsive teachers have long accepted the challenge of addressing those individual differences. Placement of a child in a segregated classroom assumes that the regular classroom model is inflexible and it is not possible to adjust it to the differences in student needs. (23:40) Further, the assumption is probably inconsistent with the stated philosophies of most contemporary school districts. It might also be stated that individual student assessments should emphasize the student's learning abilities, not his learning disabilities. Although the latter might be useful information, the teacher's primary concern should be directed toward the student's learning strengths rather than his weaknesses.

Both need and precedent for vocational education of the handicapped

are clear. As handicapped youth approach adulthood, they have the same needs and interests in exploring vocational activities as do their non-handicapped peers. Secondary schools regularly provide a wide variety of curricular activities based on abilities and interests of students. Advanced academic classes, vocational programs, music, and atheletic programs are examples. There is no reason why vocational program opportunities should not be made available to handicapped students in so far as the student placement is educationally defensible.

In the case of the mentally retarded student, it is suggested that a low intelligence quotient alone is not a debilitating learning characteristic. (20:168) Educators are encouraged to look beyond "measured intelligence" and consider learning styles and abilities. There are mentally retarded students in special assistance classes who might well benefit from mainstreaming experiences, particularly if their learning activities are individually prescribed. Conversely, there are students in the regular program who are routinely helped by their participation in special classes.

THE POPULATION: As has been said, many schools throughout the country have been mainstreaming handicapped students for years. The practice has taken on a different meaning, however, under P.L. 94-142. A careful search for handicapped youth in all problem areas must be performed, and needed services must be provided as they are individually indicated. Previously, the

mainstreaming has often been without assessment of needs or the monitored delivery of needed special services.

Public Law 94-142 limits the school age handicapped population to twelve percent for funding purposes, implying that a school district might well have that large a handicapped population. Population estimates of 1975 indicate that 6.82 percent of the nation's children between the ages of five and seventeen, and 6.46 percent of Oregon students of that age group, were receiving services. (5:3) The largest group of special needs students who are currently being mainstreamed in public schools is the educable mentally retarded. (34:37) Four of every five handicapped children are speech impaired, mentally retarded, or learning disabled. (5:1) However, 1970 Bureau of Education for the Handicapped estimates indicated only approximately fifty percent of these children were receiving services. The estimated percentage of all handicapped children receiving services was only thirty-eight percent. (22:29) (Estimates of the total population of handicapped students may be seen in Appendix C.)

As a group, the EMR learning characteristics tend not to be too different from the normal population, so heterogeneous grouping is not unreasonable. The more severely handicapped have traditionally been scheduled in special classes or in special school situations. An exception may be seen in California, where, it is estimated, at least ninety percent of the blind

and nearly all of the students classified as "partially seeing" are educated with nonhandicapped children in the public schools. (36:302) It should be remembered, however, that the total population of blind and partially sighted (visually impaired) is considerably less than the mentally retarded population.

A review of twenty-seven nationwide exemplary vocational education or rehabilitation programs indicated that twenty-three of them served educable, trainable, or severely mentally retarded. (31:96-121) A combination of nearly all other handicap groups are served in the programs, but only four of them do not include the mentally retarded. Only eight of the situations involved regular school programs, and of the eight, only one provided vocational education in a regular classroom setting.

SPECIALIZATION: The current state of affairs for the vocational education of handicapped students is nebulous, if not confusing. A combination of recent tradition in teaching, certification policies, teacher training practices, and federal and state bureaucratic structure, all have influenced the present situation. (2:I3-I14) Specialization within education has resulted in a lack of cooperation between special educators and vocational educators. Little communication, cooperative planning, or cooperative instruction occurs in most settings. Special educators normally provide the career education pre-vocational, and vocational work experiences for handicapped students, even though they are normally not certified

nor do they usually have a background in vocational education. Conversely, vocational educators have been free to teach special needs students, even though they may not be the teachers best prepared to do so. Both groups tend to view the vocational education of special needs students differently. Special educators tend to emphasize the daily living skills, while vocational educators think more in terms of specific vocational skills that are being taught. (14:26)

Ways must be explored to more efficiently and cooperatively involve vocational and special educators in the delivery of services. Colleges and universities must begin joint preparation programs which will result in appropriate training and dual certification of new teachers. They might legitimately support school districts in their attempts to provide inservice experiences for their teachers, who otherwise will be expected to teach beyond their levels of competency. Until sufficient formal programs can be developed, special educators and vocational educators might look for ways to cooperatively teach those special needs students whom they have in common. Cooperative lesson planning, team instruction, staff conferences about specific student concerns and the general sharing of professional experience are all useful outcomes of special educators and vocational educators working together.

To some extent, the status quo has resulted from fragmented federal and state legislation, the political realities of U.S. Office of

Education funding, and the state departments of education, who have patterned their activities after the federal model. There is little inter-agency coordination, often programs are duplicated, and Congressional commitment, as expressed in actual appropriations, has historically been uncertain.

CURRENT PROGRAM MODELS: The literature describes a number of models for the mainstreaming of handicapped students. Current thinking seems to support the notion that the special needs student can best be served in a regular classroom environment if the student continues to receive special education services. The special education teacher might assume the role of consultant, co-teacher, aide, or provide whatever special support is needed for the student to succeed in the regular school setting. This non-traditional role of the special education teacher may be necessary to provide the proper instructional climate, regardless of the physical setting of the class. Cooperation between the special education and vocational education teachers in planning and delivering services is essential.

The specific instructional environment for the vocational education of handicapped students may take several forms. It will be influenced by educational tradition, teacher attitudes, philosophy, costs, and the availability of facilities, equipment, and personnel. The nature of the student population and their readiness to accept one another will also greatly determine the best setting for vocational instruction of special needs students. The literature

shows that most public school special needs students are accommodated in one or a combination of four general program settings. (6:81; 33:36; 36:303) It should be mentioned, however, that a fifth category might be described as a lack of awareness or failure to deal with the problem of providing vocational instruction for handicapped students, and data show that perhaps half of the special needs students are not receiving services.

Regular placement with support. A variety of special support is necessary in order to provide vocational instruction for handicapped students. One study of deaf students indicated that teachers and the students both had low expectation levels of the students' chances for success; teachers were concerned about student safety; and teachers were doubtful about the employability of the deaf students. (18:615) These concerns are similar to the concerns of vocational educators about the handicapped student population in general.

Through special instruction using student aides, teaching aides, or modified equipment, many handicapped students can achieve in vocational programs at the same success rate as their non-handicapped contemporaries. A survey of vocational teachers working with blind students indicated that trained skill specialists can reduce many of the anxieties teachers have about the handicapped and greatly facilitate the achievement of the students. (36:303) It may sometimes be necessary to assign an aide to work on an

individual basis with a student, but more likely the facilitator can work with a small group of handicapped students. The assignment and coordination of such a person is important in order to maximize the number of student contacts. Also, matters such as student discipline, transportation arrangements, class scheduling, counseling and guidance, and liaison work with the staff must be attended to. The special needs student support person, if properly trained, might play a useful role in all these areas.

One model for placing EMR students might have implications for vocational placement. In an experimental situation in Philadelphia, those students have been assigned to resource rooms rather than special classes. The children were assigned to regular classes, and they receive the special assistance necessary for them to succeed. Informal evaluations of the program suggest that an alternate grading system should be used and greater cooperation between special educators and general educators is needed. (20:175)

Regular placement with no special support. Historically, most vocational education of the handicapped in the regular school programs has been accomplished in this environment. It has normally been limited to the teachers who are reasonably accepting and flexible in their instruction, and a handicapped population that is comparatively non-threatening. The "well-behaved" mildly retarded, and bright students with other handicaps have traditionally been more easily integrated into regular

vocational classes, whereas the more severly retarded students and those with learning disorders and emotional problems have more commonly been excluded.

This kind of class situation can provide for successful learning experiences for some special needs students, but it leaves much to chance. It does not consider how much more the students might learn should their learning needs be diagnosed and attended to. Nor does it consider the unmet vocational needs of the excluded handicapped student population.

Vocational instruction in special education classes. A rationale for this model is that the special education teachers are generally the best prepared to deal with the learning and behavioral problems of the handicapped. They may be deficient in their knowledge of vocational education, however, and may therefore be unable to provide any concrete, meaningful instruction in particular skill areas. As was said earlier, special education teachers have tended to view the vocational preparation needs of their students more from a viewpoint of their everyday problems and need to help them adjust socially. Little regard has been given to extensive career exploration and much less has been done to provide significant vocational instruction.

Modified vocational curriculum. Another environment for instruction is to modify the vocational curriculum for special needs students who are placed in regular vocational classes. This

method is similar to the "Regular Placement with Support" model, but it is different in at least one key respect. It further considers the learning limitations of the handicapped student, and it suggests that by changing either instructional content or methodology, the learner's needs might be better met.

Educators who may be concerned about course standards or who may be skeptical about the employability of only "partially prepared" students may have problems accepting this model. If a cooperative arrangement between special education and vocational education teachers can be reached, and if all the necessary support can be provided to the students, then their learning potential may well be realized. A logical extension and an integral part of this model, then, would be pre-placement counseling and guidance and vocational placement assistance.

COOPERATIVE WORK EXPERIENCE AND PLACEMENT: An important part of all of the above program models is work experience. Vocational education and the cooperative work experience component are based on the notion that handicapped persons are indeed employable. This notion is confirmed by current experience that indicates handicapped people in general have a greater potential for vocational independence than is being realized. As a group, their attendance, safety, and production records are comparable to those of the general work population. (6:80)

Cooperative work experience gives the handicapped student the opportunity to experience employment and to practice skills that have been learned in class. Three types of work experience might be made available to the handicapped. The cooperative work experience program, which normally involves pay for work performed in business or industry, in-school paid work study programs, and non-pay volunteer work have traditionally been available to handicapped students, and are all workable models. (37:24) Work experience puts relevance into learning and makes the transition to regular employment easier. It is important, however, that someone assumes the coordination and supervision responsibilities. The benefits that normal vocational students can derive from cooperative work experience can also be attained by the handicapped.

REGIONAL SUPPORT: A number of external support models are used to provide needed services to handicapped students who are enrolled in public schools. Regional support facilities generally serve those handicapped students who are not enrolled in regular vocational programs, but there are exceptions. In Portland, for example, the Regional Facility for the Deaf provides no vocational course instruction, but it does provide for cooperative and vocational work experience placement. Visually handicapped students receive similar services. The teachers of both of these groups also work directly with the students when they are enrolled in vocational education programs.

Schools in New York State may purchase services from regional agencies

known as Boards of Cooperative Educational Services (BOCES). These intermediate type school districts offer a number of services including as many as forty occupational study programs. (18:612) Similarly, North Clackamas School District in Oregon provides a vocational skills center approach to the students of the District's three high schools. Here, handicapped students are integrated into the regular vocational programs and are supported by two full-time instructors.

Portland's Vocational Village provides vocational education to disadvantaged and handicapped students who, for one reason or another, have chosen not to attend their neighborhood high school. They have been very successful in individualizing vocational instruction.

The Vocational Work Assessment Center in Portland is directed at assessing the learning strengths and limitations of EMR students. Its mission could easily be expanded to include the diagnosis of learning characteristics and the prescription of vocational learning experiences for students who have a variety of handicaps.

ASPECTS OF SUCCESSFUL PROGRAMS: There are a number of characteristics of successful in-school vocational education programs for handicapped youth. When appropriate, most of these exemplary programs demonstrate a combination of the following characteristics:

Greater teacher cooperation
Inservice programs
Instructional aides and tutoring
Individualized instruction and modified curriculum
Flexible and competency based grading
Planned work experience
Careful coordination of special needs students
Coordination of educational leadership
Modified equipment and/or facilities (when necessary)

Attention has been given to a number of these program aspects, but a brief review of each may be in order.

Greater teacher cooperation. The mainstreaming of special needs youth in vocational programs requires that teachers in both fields complement one another in their work with students. Each possesses strengths that, when shared in a spirit of cooperation, can lead to much greater student achievement. Attention must be given to the assignment and scheduling of staff in order to provide common meeting, planning, and instructional time for teachers.

Inservice programs. In order to complement and reinforce the teaching of special needs students, the teachers of differing disciplines must learn from each other. The vocational teacher must learn about the learning and other behavioral problems of handicapped youth, and the special needs teacher must learn more about the general and specific aspects of vocational education. Safety procedures for the proper use of equipment must be clearly understood and practiced. Such experiences can be facilitated through a number of inservice program models.

Inservice programs provide an opportunity for teacher training

institutions to work cooperatively with public school educators. As has been indicated, colleges and universities are faced with the same problem in that they must begin to prepare educators who are knowledgeable and competent in both disciplines. A cooperative, synergistic venture into pre-service and inservice instruction is necessary.

Instructional aides/tutoring. Special needs youngsters need a variety of in-class support. In some cases, it may be necessary to assign an aide, often a certificated instructor, to a student on a one-to-one basis. Here the need for common training and cooperative instruction is apparent. For any support person to work effectively, the person must have an understanding of the course content, and the student's learning needs. Student aides and community volunteers have also been used effectively in a variety of settings.

Individualized instruction/modified curriculum. Public Law 94-142 requires that the instruction of special needs students be individualized in that their current level of achievement will be assessed, their learning needs will be diagnosed, and appropriate short term and long term learning objectives will be prepared. Individualized learning activities, learning support materials, equipment and personnel, and in some cases, modified equipment are being increasingly included in special needs instruction. Vocational educators, working in cooperation with special educators, have effectively used combinations of tutoring, flexible grouping,

and appropriate use of media to individualize instruction.

Often the unique needs of the student require curriculum modification. Handicapped students are often able to achieve certain vocational competencies but not others. Current thinking suggests that these youth should be able to take part in vocational programs to the extent that their participation might be considered mutually beneficial to themselves and other participants.

Vocational educators have long used a competency based approach to teaching. This kind of system is ideal for the handicapped student, provided that the competency objectives are carefully planned and consistent with the student's abilities. In situations where the vocational teachers are comfortable with competency based education, and where there is a cooperative relationship with special education teachers, the transition to teaching handicapped students should be relatively easy.

Flexible grading. Much as learning objectives may be modified, it is suggested that special needs youngsters need not necessarily be graded against a "class standard" or some kind of normative notion of what their achievement should be. Instead, achievement of special needs students might best be measured in terms of their personal growth. Their evaluation should be a function of the degree to which their personal learning objectives have been reached.

Planned work experience. The same rationales for the participation of normal students in work experience programs apply to the handicapped. Work experience can positively affect all students. It provides a chance for the student to test what he has learned, practice skills, and begin to learn the demands of employment. It is a bridge between the academic world and the world of work.

The handicapped may have a unique need for work experience that is not apparent in the total population. Most handicapped youth have not had the breadth of developmental experiences as have their normal contemporaries. Often their world has been restricted, and their experiences have been quite limited. Work experience provides another meaningful way they can learn and adjust to the new social situations that are typical of those they will face throughout life.

Coordination of special needs students. The scheduling of classes, support services, and the coordination of student movement within and outside the school requires special attention. Most schools that have tried to integrate the handicapped into regular programs have assigned coordination responsibilities to a staff person, often a special education teacher whose students have been mainstreamed. The person works closely with the counselor, who often schedules the students, arranges for all the needed support services, such as tutoring, and coordinates student movement. Often elevators must be scheduled and special busses must

be arranged for transportation to work stations or regional facilities.

Coordination of leadership. Meaningful vocational education for the handicapped can not occur if the professionals isolate themselves. Cooperation and communication at the highest levels of the special education and vocational education administrative hierarchies is essential. The leadership provided by the upper echelon managers will set the tone that will be practiced by teachers in the school buildings. Matters such as funding, staffing, curriculum planning, and instructional support must be addressed in concert if strong interdisciplinary participation is to result. Each group must be sensitive to the program needs of the other, but both must also be willing to work together as they address their common educational concerns.

Modified equipment/facilities. Successful programs, primarily those serving physically or orthopedically handicapped, have to provide adequate equipment, facilities, and access to both. Ramps, hand bars, and sufficiently wide doors may be needed. Sometimes equipment may need to be modified in order to accommodate persons who must operate it from a sitting position. A variety of special tools and measuring devices are available for visually impaired students. (35:34) It must be remembered that access to and from the school building, and restroom, auditorium and cafeteria facilities must be available to all students in newly constructed buildings and in buildings where federally funded remodeling has

occured. (27:15)

THE ISSUE RESTATED: A clear description of the problem was stated in a letter from a vocational administrator from a large city school system. As he writes about the mainstreaming of handicapped youth into vocational programs, he distinguishes theory from practice. He states, "In theory you are working with the problem of getting cripples up and down stairs, or the problem of changing the curriculum, or whatever. In practice you are dealing with such things as the totally false stereotype of a handicapped person or the self-interest of teachers who will lose their jobs if a program is changed." He goes on to say, "The available handicapped pupil is mentally retarded or multiply handicapped. The stereotype is of a deaf, blind or crippled child. However these constitute only about one-third of the actual population of handicapped, and they are the third that is easiest to integrate." He mentions that they have had good success in getting these students accepted into vocational programs,providing the placement was thoughtful and well planned in the first place. Later, in his correspondence, the administrator identifies what he feels are the two crucial problems that must be overcome. We must deal with "...the fear of the receiving teacher that he is getting the 'dregs' from somebody else, and the fear of the sending teacher that if he sends enough pupils, he won't have any job left."

The problems, then, may be more attitudinal, emotional, and

informational and experiential than concrete in nature. Whatever progress we are able to make regarding the vocational education of handicapped must take these factors into account.

SUMMARY: Public Law 94-142 is forcing educators to take a fresh look at the education of the handicapped. Past federal and state legislation has addressed the problem, but P.L. 94-142 is more prescriptive than any previous laws. The implications for vocational education are the same as those for general education, that is, we must strive to identify ways of providing appropriate, less restrictive vocational instruction to the special needs population.

A number of tested program models are available that can be implemented in any public school situation. It was stressed, however, that if a vocational program for handicapped students is going to be successful, increased staff cooperation and communication, vigorous inservice training, possible reassignment of staff duties, and strong educational leadership will be required. The literature review also resulted in the identification of a number of positive vocational program characteristics which were discussed in this review.

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APPENDIX A

(Letter to Curriculum Leaders)

PORTLAND PUBLIC SCHOOLS
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CHILD SERVICE CENTER

November 22, 1977

Dr. Sidney Estes
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Dear Dr. Estes:

The Portland School District is engaged in a research project designed to identify ways to increase the number of handicapped students who will be enrolled in vocational programs. We are, therefore, deeply interested in learning what other school districts are doing regarding this matter. Some specific concerns are:

What strategies have been employed to increase the number of handicapped students in vocational programs?

What organizational and administrative practices have been found to be most successful?

What staff, physical resources, and space problems have been encountered, and what were some solutions?

What staff development materials have been developed which might be transportable to other school districts?

In what ways has the curriculum had to be modified in order to accommodate handicapped students?

Since we are all working toward total compliance with P.L. 94-142, it would seem reasonable to exchange information and to share experiences to the maximum extent possible. To this end, I will be most delighted to keep you informed of our progress and to respond, in so far as possible, to similar requests from your school district.

Thank you for your time and interest; I will be looking forward to hearing from you.

Sincerely,

Richard R. Rumble
Project Director

RR:ke

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APPENDIX C

(Statistics)

NUMBER OF CHILDREN RECEIVING

SPECIAL EDUCATION AND RELATED SERVICES

(1977 HEW DATA)

Handicapping Condition	Total Served	Percent of Total Served
Speech Impaired	1,309,020	35.2
Mentally Retarded	971,744	26.1
Learning Disabled	799,593	21.5
Emotionally Disturbed	284,385	7.6
Other Health Impaired	141,556	3.8
Deaf and Hard of Hearing	89,744	2.4
Orthopedically Impaired (Crippled)	87,302	2.3
Visually Handicapped	38,464	1.0
TOTAL	3,721,808	99.9*
TOTAL HANDICAPPED SERVED IN OREGON	37,258	100

* "BEH Data Notes." Bureau of Education for the Handicapped, U.S. Department of Health, Education and Welfare, September, 1977.